

What is claimed is:

1. A rotary electric machine comprising:

a stator including a stator core having a plurality of teeth and stator coils mounted on the teeth, each said stator coil including a bobbin that is fitted to one of the teeth and a phase coil wound around the bobbin, each said bobbin including a bobbin terminal for connecting opposite ends of the phase coil; and

a stator housing for accommodating said stator, said stator housing including an insert mold and a plurality of stator terminals embedded in the insert mold to be connectable to an outside electric device, each said stator terminal has a first contact portion;

wherein each said bobbin terminal has a second contact portion in contact with the first contact portion when said stator is accommodated in said stator housing.

2. The rotary electric machine as claimed in claim 1,

wherein each said bobbin has a terminal groove in which one of said stator terminals is inserted when said stator is accommodated in said stator housing.

3. The rotary electric machine as claimed in claim 2,

wherein each said terminal groove has an end opening wide to receive one of said stator terminals.

4. The rotary electric machine as claimed in claim 1,

wherein said plurality of stator terminals is assembled into a

resinous frame, and

wherein said resinous frame is embedded in said insert mold.

5. The rotary electric machine as claimed in claim 1,

wherein said stator housing further comprises a resinous frame embedded in said insert mold to hold said plurality of stator terminals and a metal reinforcement plate for supporting a ball bearing that rotatably supports an end of said rotor.

6. The rotary electric machine as claimed in claim 5,

wherein said stator housing has a center bore for supporting said ball bearing, and

wherein said center bore has an inside surface the diameter of which is formed with reference to one of an outside diameter and inside diameter of said stator.

7. The rotary electric machine as claimed in claim 1,

wherein said plurality of stator coils comprises a first coil group including phase coils disposed in a circumferential direction and a second coil group including phase coils disposed in a circumferential direction, and

wherein said plurality of stator terminals comprises a first terminal group and a second terminal group that are disposed to be symmetric to each other with respect to a diametric line of a contour of the assembled stator terminals.

8. The rotary electric machine as claimed in claim 7,

wherein said stator terminals are stamped out from a metal plate.

9. The rotary electric machine as claimed in claim 8, further comprising a first connector for connecting said stator terminals of the first terminal group to an outside electric device and a second connector, separated from said first connector, for connecting said stator terminals of the second terminal group to an outside electric device.

10. The rotary electric machine as claimed in claim 1, further comprising a sensor connector for connecting said sensor terminals to an outside electric device,

wherein said stator housing further includes rotation angle detector and a plurality of sensor terminals embedded in said insert mold, and

wherein said stator terminals and said sensor connector are integrated.

11. A rotary electric machine comprising:

a stator core having a plurality of teeth and bobbins respectively fitted to the teeth;

a plurality of phase coils respectively wound around said bobbins, each said bobbin including a pair of bobbin terminals to which opposite ends of one of said phase coils are connected; and

a stator housing for accommodating said stator coil and said phase coils, said stator housing including a plurality of stator terminals embedded to be connectable to an outside electric device, each said stator terminal having a first contact portion;

wherein each said bobbin terminal has a second contact portion in

contact with the first contact portion when said stator is accommodated in said stator housing.

12. A method of manufacturing a rotary electric machine that includes a stator core having a plurality of teeth and stator coils mounted on the teeth and a stator housing having a plurality of stator terminals to be connectable to an outside electric device, said method comprising the steps of:

winding a phase coil around bobbins each of which has a pair of bobbin terminals;

respectively connecting opposite ends of each phase coil to the bobbin terminals of each pair;

fitting each bobbin to one of the teeth of said stator core;

accommodating said stator into said stator housing,

wherein each the bobbin terminal is brought in contact with the stator terminal when the stator is accommodated in the stator housing.